TEXAS TECH UNIVERSITY™

Office of the President

October 6, 2006

The Honorable Tom Coburn, Chairman
Subcommittee on Federal Financial Management,
Government Information and International Security
Committee on Homeland Security and Government Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I should like to respond to your letter of July 27, 2006, in which you asked six questions relating to earmarked federal grants received by Texas Tech University since FY 2000.

Your letter states that your Subcommittee is interested in learning more about the effect of earmarked research grants on the colleges and universities that receive them. In the case of Texas Tech University, the earmarks received by our institution since we began requesting those funds in 1997 have helped us to grow both the size and quality of our research programs and have enhanced our ability to win competitive federal research grants.

The goal of Texas Tech University for many years has been to expand its research capabilities in several targeted areas that are critical to West Texas, our state as a whole, and the nation. These areas include where we have unique research strengths such as cotton research, food safety, wind engineering, biochemical terrorism countermeasures, and environmental and human health at Department of Defense sites, among others. As a young research university, Texas Tech made a strategic decision to approach our Texas Congressional Delegation for earmarked federal funds that would jump start these research programs, thus enabling us to compete successfully for research dollars in the future.

We strongly believe that the Congressional earmark funding has accelerated the Texas Tech research programs. This modest federal investment in our infrastructure has allowed us to contribute to the national scientific research effort at a much higher level.

I have attached a list of all federal appropriations to Texas Tech with a description of their purpose and focus. The list includes the funding level by year since FY 2000. We hope that this list is responsive to questions 1 and 2, though a thorough response to question 2 would be extensive.

You asked (question number 3) how our university sets standards to achieve quality and outcomes for research programs funded by earmarks. Texas Tech treats earmarked grants and grants won through competitive means equally. Our researchers work closely with the federal agencies administering the earmarked grants to ensure that the agreed upon scope of work closely mirrors the research mission of the agency. Earmarked grants also are reviewed and audited by the federal agencies in the same manner as competitive grants.

Our university currently does not have a written policy concerning Congressional appropriations or written guidelines regarding partnering with other universities that may have a differing policy.

Texas Tech University has retained a lobbyist to assist in federal relations to help us both with directed and competitive funding opportunities.

In conclusion, earmarked federal grants have contributed greatly to the growth of our research programs and have enhanced our ability to better compete for competitive research grants. As a result of these grants, Texas Tech's emerging research programs are making a significant contribution to our region, our state and our nation.

Sincerely,

Jon Whitmore

Jon Whitmore
President

Attachment

xc: Dr. Donald Haragan, Interim Chancellor

TEXAS TECH UNIVERSITY INITIATIVES

Congressionally Directed Funding
($ in Millions)

2000	2001	2002	2003	2004	2005	2006

Chernobyl Radiation Health Effects Research

.000	.000	.000	1.000	.000	.000	.000

Texas Tech scientists are using the radioactive fallout from the Chernobyl accident to investigate the dispersion of radiation into urban and rural environments. Their data are being used to develop models to predict the scope of future incidents at nuclear facilities or a possible radioactive release from the detonation of a "dirty" weapon by terrorists. Texas Tech researchers are acquiring long-term data on the biological, environmental, and health effects of chronic radiation exposure and the effectiveness of technologies for risk reduction and cleanup.

Countermeasures to Biological and Chemical Terrorism

4.500	3.000	1.750	4.500	1.750	2.000	1.400

This federal initiative has allowed Texas Tech scientists to develop research expertise and infrastructure pertaining to biological and chemical terrorism. These scientists focus on countermeasures to biological and chemical threats, including pre-incident communications and intelligence; personnel protective equipment; detecting and measuring chemical and biological agents; recognizing covert exposure; mass-casualty decontamination and triage procedures; the availability, safety, and efficacy of drugs, vaccines, and other therapeutics; and developing computer-based tools for training and operations. This federal appropriation has allowed Texas Tech to conduct research programs that are important to the mission of the U.S. Departments of Defense and Homeland Security and has helped Texas Tech to become competitive for federal research funds.

Environmental and Human Health Risks at DoD Sites

1.400	2.000	1.000	2.500	1.000	1.000	1.000

This program conducts research to identify environmental and human health risks of relevance to the U.S. Department of Defense using innovative environmental technologies and risk assessment methods. Research projects examining environmental contaminants from energetic compounds (e.g. RDX and HMX) address serious environmental hazards and provide data that assists the U.S. government in the establishment of environmental exposure levels, enhances ecological and human health, and facilitates military base cleanup and remediation. In these projects, researchers use the best and most current science along with risk-based approaches to assess the risks of toxic substances to human health and the environment.

Engineering Support for Extended Space Flight Missions

0.900	1.500	1.675	2.500	2.000	1.000	1.000

Texas Tech University has worked very closely with NASA to provide engineering support for extended space flight missions. Texas Tech researchers are addressing the need for a decreased reliance on mission control due to the communication delays that occur in long-distance missions, as well as addressing the need for robust engineered systems that are capable of real-time fault detection and recovery that can occur with both autonomous navigation systems and regenerative systems. For human missions, Texas Tech researchers also are addressing the need for greater autonomy in dealing with the physical needs of the astronauts, including long-term water recycling, which currently limits the habitation period possible without re-supply, and the ergonomics and human factors aspects of human performance in zero and reduced gravity environments.

TEXAS TECH UNIVERSITY INITIATIVES

Congressionally Directed Funding
($ in Millions)

	2000	2001	2002	2003	2004	2005	2006
Expanding Opportunities in Math and Science Education for Rural Texas	.000	.000	.000	.500	.250	.100	.000

To respond to recent legislative changes that require Head Start teaching staff to have Associate and Baccalaureate degrees, Texas Tech University and Austin Community College have established a partnership with Head Start programs in central Texas to provide Early Childhood Education degree programs for non-traditional students in primarily rural areas. This initiative proposes to make available both Associate and Baccalaureate degree programs in Early Childhood Education to Head Start teaching staff in central Texas.

Study of Addiction and Recovery	.000	.000	.000	.000	.250	.250	.000

The purpose of the Center for the Study of Addiction and Recovery is to create a comprehensive educational, social support, and recovery service network for students in higher education who are recovering from addictive disorders or who have grown up in families impacted by addiction. The focus of Texas Tech researchers is to provide continuing care and relapse prevention for students recovering from addictive disorders. A main goal of the center is to serve as a demonstration program with a highly specific organizational framework that easily can be replicated by other institutions for higher education.

The National Virtual Vietnam Archive	0.461	0.500	0.961	.400	.500	.500	.000

The goal of the National Virtual Vietnam Archive is to make records of the American Vietnam experience available to all Americans by digitizing the Vietnam War records at the National Archives and putting these holdings online. Texas Tech is internationally recognized as one of the leading Vietnam research centers in the world. Since 2001, the Virtual Archive has grown into the largest online resource for historical materials related to the Vietnam War and currently contains more than 2.3 million pages of materials. The National Virtual Vietnam Archive has responded to nearly three million page requests and researchers have downloaded 600,000 files. The Archive has briefed Presidents prior to visits to Vietnam and has arranged numerous visits and trade relationships between the United States and Vietnam.

Water Law and Policy	.000	.000	.000	.000	.000	.000	.450

The purpose of the Center for Water Law and Policy is to create and develop opportunities for exploring and assessing legal, regulatory, institutional and policy aspects of the use, allocation, management, regulation, and conservation of fresh water resources. The research will generate important data and information that will be provided to the public as well as to local, regional, state, and national policy makers, legislatures, and other economic and social interest groups to enhance decision-making processes and to encourage the proactive consideration of water resource objectives.

Wind Science and Engineering Research	1.300	1.800	2.000	2.500	1.900	.000	1.500

Texas Tech's Wind Science and Engineering Research Center is internationally recognized for its research in structural damage from catastrophic wind events and for its efforts to improve the design and construction of buildings that must withstand violent winds to protect the occupants. Texas Tech scientists have provided substantial input in preparing FEMA shelter publications 320 and 361. Researchers have been in the path of most major land falling hurricanes over the past six years, including Katrina, with extensive instrumentation to measure the winds and relate the winds to the structural damaged produced. The research conducted by the Wind Science and Engineering Research Center has saved lives and reduced property damage in the states vulnerable to extreme wind events.

TEXAS TECH UNIVERSITY INITIATIVES

	Congressionally Directed Funding ($ in Millions)						
	2000	2001	2002	2003	2004	2005	2006

Texas Tech University Collaborative Initiatives *

* For collaborative initiatives with other universities or federal agencies, only research funds that are distributed to Texas Tech University are listed.

Compact Pulsed Power for Destruction of IEDs

	.000	.000	.000	.000	.000	.412	.000

The purpose of this research is to develop compact electromagnetic radiation sources for integration into standard weapons systems for defense applications that require the destruction of electronic hardware while minimizing collateral damage. A key target would be the disruption of remote detonation electronics used in improvised explosive devices (IEDs). The initial research on this technology has gained attention from defense contractors, e.g. Lockheed Martin, and the House Armed Services Committee because of its potential for disrupting IEDs. This technology has a number of applications that are important to the Departments of Defense and Homeland Security.

Great Plains Sorghum Improvement and Utilization

	.000	.000	.000	.000	.000	.000	.210

The lead institution on this federal appropriation is Kansas State University in partnership with Texas A&M and Texas Tech. The purpose is to integrate the research and extension resources for sorghum improvement, utilization, production, and marketing. These universities bring multidisciplinary teams together to focus on improvement of profitability in each stage of sorghum production, processing, and marketing.

North American Studies

	.000	.000	.050	.050	.161	.180	.180

The purpose of this effort is to promote stronger relationships among Canada, Mexico, and the United States in trade of food and fiber products. Four universities are involved in this partnership: Texas Tech, Louisiana State, New Mexico State, and Texas A&M, which is the lead institution. The focus of the partnership is to strengthen activities in education and training, research, policy analysis, and cooperative study as they relate to trade issues in food and fiber products among the three countries.

Ogallala Aquifer Research

	.000	.000	.000	.150	.371	.539	.844

The lead agency on this federal appropriation is the United States Department of Agriculture, with technical support from Texas A&M, Texas Tech, Kansas State, and West Texas A&M Universities. The purpose is to protect the Ogallala Aquifer and retain the economic integrity of the Southern Great Plains region, including the Texas High Plains, and portions of Oklahoma, New Mexico, Kansas, and Colorado. The economic viability of these states is dependent on the survival of the Ogallala Aquifer.

Optimizing Production Systems, Market, and Policy for Cotton

	.200	.500	.830	1.190	2.237	2.500	2.500

This federal appropriation is a partnership among the United States Department of Agriculture, Texas A&M University, and Texas Tech University. The purpose of this partnership is to develop a multidisciplinary cotton research program for cotton production systems, to continue market and policy analysis for natural fibers (cotton, wool, and mohair), to increase profitability, and to maintain viability of all segments of the U.S. cotton industry in an increasingly competitive and volatile international market.

TEXAS TECH UNIVERSITY INITIATIVES

	Congressionally Directed Funding ($ in Millions)						
	2000	2001	2002	2003	2004	2005	2006
Texas Tech University Agriculture Initiatives							
Food Industry Excellence	.000	.000	.000	.250	.222	.874	1.367

The International Center for Food Industry Excellence conducts systematic development and evaluation of production, processing and preparation methods of food products (from farm to table) to achieve a safer and more nutritious food supply. This program is dedicated to improving the safety, quality, utility, and acceptance of food innovations and resultant food products. The focus is to create a mechanism by which food innovations can be evaluated from the agricultural production, manufacturing, food service, and retail perspectives. These federal appropriations have resulted in strengthening the research expertise and infrastructure of Texas Tech University and in securing new federal competitive research funding.